

REMARKS/ARGUMENTS

The Office Action of November 17, 2008 has been carefully reviewed and these remarks are responsive thereto. Claims 1, 3, 5-11, 13, 15-27 remain in this application. Claims 2, 4, 12 and 14 were previously canceled without prejudice or disclaimer. No new matter has been added. Reconsideration and allowance of the instant application are respectfully requested.

Personal Interview

Applicants wish to thank Examiner Rampuria for the courtesies extended to the undersigned during a telephone interview on February 11, 2009. The following remarks include Applicants' substance of interview pursuant to MPEP § 713.04.

Rejections under 35 U.S.C. § 101

Claim 23 stands rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter. Applicants have amended claim 23 to present the subject matter in a more preferred form. As discussed and agreed to during the interview, the amendments are supported by the originally filed specification when read as a whole, and in particular, by at least the illustrative, non-limiting disclosure included at page 5, lines 22-30. In view of the amendments, Applicants respectfully request withdrawal of the corresponding objection.

Rejections under 35 U.S.C. § 103

Claims 1, 3, 5-11, 13, and 15-24 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. publication no. 2003/0096622 to Moilanen ("Moilanen") in view of U.S. patent no. 6,252,543 to Camp ("Camp"). Claim 25 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Moilanen and Camp and further in view of U.S. publication no. 2001/0022558 to Karr, Jr., et al. ("Karr"). Claims 26-27 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Moilanen and Camp and further in view of U.S. patent no. 7,000,015 to Moore et al. ("Moore"). Applicants respectfully traverse these rejections.

Independent claim 1 is directed to a method for locating a mobile terminal within a mobile communication network. Claim 1 recites, among other features, "measuring a set of physical dimensions . . . the set of physical dimensions comprising any combination of physical

dimensions selected from the group comprising signal power received by the mobile terminal starting from the base station, timing advance, observed time differences, and time of arrival, generating, starting from said set of physical dimensions and respective functions, a global locating error function which has a minimum for values of said locating co-ordinates corresponding with the position occupied by said mobile terminal, [and] seeking the minimum of said error function by varying at least one of said locating co-ordinates.”

The Office Action at pages 3-4 contends that Moilanen discloses the above-noted features related to generating, starting from a set of physical dimensions and respective functions, a global locating error function which has a minimum for values of locating co-ordinates corresponding with a position occupied by a mobile terminal, [and] seeking the minimum of the error function by varying at least one of the locating co-ordinates. The Office Action at page 4 correctly indicates that Moilanen fails to describe features related to a set of physical dimensions comprising any combination of physical dimensions selected from the group comprising signal power received by the mobile terminal starting from the base station, timing advance, observed time differences, and time of arrival as recited in claim 1. The Office relies on Camp at col. 7, lines 57-62, col. 11, lines 15-19, col. 1, lines 48-56 and col. 2, lines 63-67 to allegedly remedy the deficiencies of Moilanen in this respect. Furthermore, the Office asserts that it would have been obvious to one of ordinary skill in the art at the time of the instant invention to combine Camp with Moilanen for purposes of locating a mobile terminal within a mobile telecommunications system.

As discussed during the interview, Camp at col. 10, line 35 – col. 11, line 40 and Figure 4 seeks to eliminate (synchronization) errors by way of a GPS correlator 50 that receives inputs from an internal clock 46 and a GPS clock 48 and generates a correlated clock signal value T1. T1 is used as an input in generating a summed output signal value T3 that is output by message generator 56. Accordingly, one skilled in the art would not have had a reason to combine Camp with the alleged teachings of Moilanen related to generating, starting from a set of physical dimensions and respective functions, a global locating error function which has a minimum for values of locating co-ordinates corresponding with a position occupied by a mobile terminal, [and] seeking the minimum of the error function by varying at least one of the locating

co-ordinates as recited in claim 1. More specifically, and as discussed during the interview, Camp describes eliminating errors by way of GPS correlator 50, and thus, one skilled in the art would not have had any apparent reason to generate a global locating error function and seek the minimum of that error function when the errors are eliminated by GPS correlator 50. Stated in a slightly different way, correlator 50 in Camp eliminates the error, and as such, when reading the references as a whole one skilled in the art would not have had any apparent reason to combine the references in the manner suggested by the Office Action to also generate, starting from the set of physical dimensions and respective functions, a global locating error function which has a minimum for values of the locating co-ordinates corresponding with the position occupied by a mobile terminal, and seek a minimum of the error function by varying at least one of the locating co-ordinates. As such, since the combination of references is improper, claim 1 is allowable for at least the foregoing reasons.

Independent claims 11 and 23 recite features similar to those described above with respect to claim 1. As such, claims 11 and 23 are allowable for at least reasons substantially similar to those described above with respect to claim 1.

The remaining claims are allowable for at least the same reasons as claims 1 and 11 described above, and further in view of the additional features recited therein, because the additional applied references (e.g., Karr and Moore) fail to remedy the deficiencies of Moilanen and Camp described above.

For example, dependent claim 9 recites “interrupting said iterative process when the absolute distance between two successive points is below a determined threshold value.” At pages 10-11 of Applicants’ “Response After Final Rejection” dated October 31, 2008, Applicants distinguished the above-noted features recited in claim 9 over Moilanen. Applicants incorporate those remarks herein by way of reference. In short, Moilanen at paragraphs [0063]-[0064] describes an additional weight function, $s(x)$, that may be added to a weighted error function, wherein the purpose of the $s(x)$ function is to avoid finding local minimum far from an area of interest. As discussed and agreed to during the interview, such an $s(x)$ function fails to fairly teach or suggest features related to interrupting an iterative process when an absolute

distance between two successive points is below a determined threshold value as recited in claim 9.

The Office Action at page 6 repeats the prior rejection of claim 9 based on paragraph [0063] of Moilanen, and the Office Action at page 10 ("Response to Amendments & Remarks") fails to address Applicants' remarks regarding claim 9. In the event that the Office maintains a rejection of claim 9 based on Moilanen, Applicants respectfully request the Office to answer the substance of Applicants remarks included at pages 10-11 of Applicants' Response After Final Rejection dated October 31, 2008. For at least the reasons described above, which were discussed and agreed to during the interview, Moilanen fails to teach or suggest features related to interrupting an iterative process when the absolute distance between two successive points is below a determined threshold value as recited in claim 9. As such, claim 9 is allowable for at least these additional reasons.

CONCLUSION

If any fees are required or if an overpayment is made, the Commissioner is authorized to debit or credit our Deposit Account No. 19-0733, accordingly.

All rejections having been addressed, Applicants respectfully submit that the instant application is in condition for allowance, and respectfully solicit prompt notification of the same.

Respectfully submitted,
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